

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/001340

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60G17/015 B62D9/02 B62K5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B60G B62D B62K B60N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 368 796 A (PATIN PIERRE) 18 January 1983 (1983-01-18) cited in the application column 9, line 1 - line 63; figures 7,8 abstract ----- FR 2 450 480 A (PATIN PIERRE) 26 September 1980 (1980-09-26) page 3, line 8 - line 36; figure 1 page 4, line 38 - line 39 ----- DE 195 01 087 A (NATTEFORT NORBERT ; KUTZKE HARALD (DE)) 18 July 1996 (1996-07-18) column 6, line 50 - column 7, line 19; figures 1,2,8 ----- -/-	1,3,4,6, 7,9,13, 14
A	-----	1,3,4,6, 7,9,11, 13,14
A	-----	1,3-5,7, 13,14

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

11 May 2005

Date of mailing of the International search report

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PCT/EP2005/001340

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 197 38 826 A (DAIMLER BENZ AG) 11 March 1999 (1999-03-11) column 4, line 2 - line 11; figures 1,2 column 3, line 27 - line 45 -----	2
A	US 2003/098662 A1 (OH PAHNGROC ET AL) 29 May 2003 (2003-05-29) paragraph '0009!; figure 1 paragraph '0011! -----	1,13
A	US 2002/173892 A1 (OH PAHNGROC) 21 November 2002 (2002-11-21) paragraph '0013!; figure 2 paragraph '0009! -----	1,13
A	DE 44 06 245 A (NATTEFORT NORBERT ; KUTZKE HARALD (DE)) 19 January 1995 (1995-01-19) column 5, line 25 - line 46; figure 8 -----	1,13
A	WO 99/47372 A (EDWARDS LAWRENCE K) 23 September 1999 (1999-09-23) page 16, line 4 - page 19, line 3; figure 13 -----	1,13
A	DE 100 12 035 A (VOLKSWAGENWERK AG) 6 September 2001 (2001-09-06) abstract -----	1,13
A	US 4 921 263 A (PATIN PIERRE) 1 May 1990 (1990-05-01) -----	
A	DE 42 01 412 A (PHILIPP MARTIN) 22 July 1993 (1993-07-22) -----	
A	WO 99/54186 A (FALCHI FRANCESCO) 28 October 1999 (1999-10-28) -----	
A	US 2 998 263 A (FOERSTER HANS-JOACHIM M ET AL) 29 August 1961 (1961-08-29) -----	
A	US 6 026 920 A (OBEDA EDWARD G ET AL) 22 February 2000 (2000-02-22) -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP2005/001340

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4368796	A	18-01-1983	FR DE EP WO IN JP JP SU	2418737 A1 2962415 D1 0004230 A1 7900686 A1 151191 A1 1017913 B 55500103 T 1111679 A3	28-09-1979 19-05-1982 19-09-1979 20-09-1979 05-03-1983 03-04-1989 21-02-1980 30-08-1984
FR 2450480	A	26-09-1980	FR	2450480 A1	26-09-1980
DE 19501087	A	18-07-1996	DE DE WO	4406245 A1 19501087 A1 9502521 A1	19-01-1995 18-07-1996 26-01-1995
DE 19738826	A	11-03-1999	DE WO EP JP	19738826 A1 9912795 A1 1009650 A1 2001515821 T	11-03-1999 18-03-1999 21-06-2000 25-09-2001
US 2003098662	A1	29-05-2003	EP JP EP EP EP JP JP JP WO WO WO US US US	1250244 A1 2004513835 T 1211123 A1 1276405 A1 1276404 A1 2002240599 A 2004513833 T 2004514588 T 0243531 A1 0241737 A1 0242113 A1 2003011337 A1 2003107231 A1 2002173892 A1	23-10-2002 13-05-2004 05-06-2002 22-01-2003 22-01-2003 28-08-2002 13-05-2004 20-05-2004 06-06-2002 30-05-2002 30-05-2002 16-01-2003 12-06-2003 21-11-2002
US 2002173892	A1	21-11-2002	EP EP EP EP JP JP JP JP WO WO WO US US US	1211123 A1 1250244 A1 1276405 A1 1276404 A1 2002240599 A 2004513833 T 2004513835 T 2004514588 T 0243531 A1 0241737 A1 0242113 A1 2003011337 A1 2003107231 A1 2003098662 A1	05-06-2002 23-10-2002 22-01-2003 22-01-2003 28-08-2002 13-05-2004 13-05-2004 20-05-2004 06-06-2002 30-05-2002 30-05-2002 16-01-2003 12-06-2003 29-05-2003
DE 4406245	A	19-01-1995	DE WO DE	4406245 A1 9502521 A1 19501087 A1	19-01-1995 26-01-1995 18-07-1996
WO 9947372	A	23-09-1999	AU WO	3083199 A 9947372 A1	11-10-1999 23-09-1999
DE 10012035	A	06-09-2001	DE	10012035 A1	06-09-2001

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No	
PCT/EP2005/001340	

Patent document cited in search report	Publication date		Patent family member(s)		Publication date
US 4921263	A	01-05-1990	FR BR CA DE EP IN JP US	2600612 A1 8703266 A 1304693 C 3770347 D1 0251906 A1 167693 A1 63046982 A 5040812 A	31-12-1987 15-03-1988 07-07-1992 04-07-1991 07-01-1988 08-12-1990 27-02-1988 20-08-1991
DE 4201412	A	22-07-1993	DE	4201412 A1	22-07-1993
WO 9954186	A	28-10-1999	IT WO JP	RM980242 A1 9954186 A1 2002505638 T	18-10-1999 28-10-1999 19-02-2002
US 2998263	A	29-08-1961	DE FR FR GB	965293 C 1151546 A 1151598 A 802937 A	06-06-1957 31-01-1958 31-01-1958 15-10-1958
US 6026920	A	22-02-2000	NONE		